REMARKS

Claims 1-12 remain pending in this application. None of the claims were amended in this response. Applicant notes that, while the Office Action addressed claims 1-6, the application papers filed on February 11, 2004 contained original claims 1-12. Nevertheless, in order to further prosecution, Applicant will address the cited rejections below.

The Specification was objected to for minor informalities. In light of the amendments to the Specification submitted herein, Applicant submits the objectionable matter has been addressed. With regard to the terms "cells" and "sectors," Applicant submits the usage of the terms would readily be understood by one having ordinary skill in the art. At the beginning of the claimed method, the mobile terminal does not know if it is dealing with a "usual" cell or a sector of a sectorized base station. When a mobile terminal receives a first set of cell identifiers, the identifiers may be associated with neighboring cells both with and without sectors of cells. Accordingly, the received signals are treated the same way regardless of whether they belong to an "usual" cell or a sector of a cell. Under the disclosure, cells have the same cell identity as another cell in the set of available cells are not selected if it is probable that the cells are sectors of the same cell. Withdrawal of the objections is earnestly requested.

Claim 1-6 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Ville et al.* (EP 0930513) in view of *Padovani et al.* (US patent 5,577,022). Applicant respectfully traverses these rejections. Favorable reconsideration is respectfully requested.

Specifically, none of the cited art, alone or in combination, teaches or suggests "measuring, at the mobile terminal, received signal strengths of the neighboring cells having identifiers which are included in the first set of cell identifiers, with a number N of cells having a signal strength exceeding a predefined threshold constituting a set of available cells; reading, at the mobile terminal, a synchronization channel for the set of available cells, thereby measuring time differences for the set of available cells; selecting, at the mobile terminal, a second set of cells from the set of available cells using a predefined selection rule, the second set of cells including M < N cells, wherein the predefined selection rule causes a non-selection of a cell having a same cell identity as another cell in the set of available cells if it is probable that the cell which is not selected and the another cell belong to one sectorized base station; and reading, at the mobile terminal, a synchronization channel for the second set of cells, thereby measuring

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time differences for the second set of cells" as recited in claim 1 and similarly recited in claims 7 and 11.

As already recognized on page 3 of the present application, *Ville* discloses a cellular radio network based positioning system for determining the position of a mobile station For each base transceiver station or cell of the network, a fixed list of base transceiver stations is stored by a mobile positioning center. Each list identifies base transceiver stations which enable the position of a mobile station served by the corresponding base transceiver station to be optimally determined (see Abstract). The list is transmitted to the mobile station via the serving base transceiver station and the mobile station determines an observed time difference for each of the listed base transceiver stations, relative to the serving base transceiver station, from signals broadcast by the listed base transceiver stations. The observed time differences are transmitted from the mobile station to the serving base transceiver station and are used by the network to compute the position of the mobile station(see Abstract; [0028-29]).

In contrast, claims 1 and 11 of the present application recite a method for forming a set of cells for time difference measurement for a mobile terminal camped on a first cell of a similar network and being in idle mode. The claims clearly recited that the mobile terminal measures "received signal strengths of the neighboring cells having identifiers which are included in the first set of cell identifiers, with a number N of cells having a signal strength exceeding a pre-defined threshold constituting a set of available cells." Ville clearly teaches away regarding the measurement of received signal strengths at the mobile terminal or for neighboring cells which cell identifiers have been received by the mobile terminal. Paragraph [0007] of Ville explicitly recognizes the measurement of relative field strengths as a <u>detrimental</u> factor to the disclosure contained in the document ("[t]his renders the method unsuitable in practice for cellular radio positioning"). Furthermore, Ville does not provide any teaching regarding a <u>combination</u> of field strengths and time measurements.   The selection of cells available for time difference measurements with the selection criterion being based on the received signal strengths of the neighboring cells having identifiers which are included in the first set of cell identifiers is clearly recited in the present claims, and is not addressed in Ville.

Moreover, it follows that Ville also does not teach the mobile terminal reading a synchronization channel for the set of available cells, thereby measuring time differences for the

set of available cells. As discussed in the paragraph above, the available cells are determined by measuring, at the mobile terminal, received signal strengths of the neighboring cells having identifiers which are included in the first set of cell identifiers. As Ville teaches away from this configuration Ville also does not teach reading, at the mobile terminal, a synchronization channel for the set of available cells, thereby measuring time differences for the set of available cells.

As the Office Action conceded (page 4), Ville fails to teach the mobile terminal selecting a second set of cells from the set of available cells using a pre-defined selection rule, the second set of cells including M < N cells, wherein the pre-defined selection rule causes a non-selection of a cell having a same cell identity as another cell in the set of available cells if it is probable that the cell which is not selected and the another cell belong to one sectorized base station. As also admitted by the Examiner, Ville is completely silent concerning a corresponding step. It also follows that, under these circumstances, Ville also fails to teach the mobile terminal reading "a synchronization channel for the second set of cells, thereby measuring time differences for the second set of cells" as required by the present claims.

Padovani fails to solve the deficiencies of Ville, discussed above. Padovani discloses a method for performing a pilot signal searching operation in anticipation of a hand-off between base stations (see Abstract). The mobile station in Padovani maintains a list (cf. list contained in the mobile positioning center of Ville) of an Active Set of pilot signals transmitted from base stations with which the mobile station is to communicate through, and a Neighbor Set of pilots within a predetermined proximity of the mobile station (col. 7, lines 9-44). In addition to the Neighbor and Active Sets of pilots, the mobile station maintains a list of Candidate and Pre-Candidate Sets of pilots. Based on analysis of the signal strength of the pilot signals received at the mobile station, base station entries from the Neighbor Set may be assigned to the Pre-Candidate and Candidate Sets, and eventually to the Active Set (col. 8, lines 18-41).

It is clear from the disclosure that Padovani does not deal with a method for forming a set of cells for time difference measurements for a mobile terminal. Also, Padovani does not teach that cells are selected using a pre-defined selection rule that causes a non-selection of a cell having the same cell identity as another cell in the set of available cells if it is probable that the cell which is not selected and the another cell belong to one sectorized base station.

It is clear that there is no teaching, suggestion or motivation for one of ordinary skill in the art to combine the Ville and Padovani references in the manner suggested in the Office Action. The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). When the motivation to combine the teachings of the references is not immediately apparent, it is the duty of the examiner to explain why the combination of the teachings is proper. *Ex parte Skinner*, 2 USPQ2d 1788 (Bd. Pat. App. & Inter. 1986). (see MPEP 2142). Further, the Federal Circuit has held that it is "impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." *In re Fritch*, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992). "One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention" *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

The disclosure in Ville is clearly based on time difference measurements whereas the method according to Padovani is based on measuring signal strengths, which was a disparaged method according to Ville (see above). Also, Ville deals with a positioning system whereas Padovani deals with pilot signal searching in the context of a handoff to avoid "false alarms" for a given pilot strength detection period (col. 10, lines 63-67). Neither Ville or Padovani teaches the combination of signal strengths and the measurement of time differences in a manner recited in the present claim, and neither references teach the use of a predefined selection rule which causes a non-selection of a cell having a same cell identity as another cell in the set of available cells if it is probable that the cell which is not selected and the another cell belong to one sectorized base station. Applicant does not understand how these teachings could conceivably be combined and retain any reasonable expectation of success (see MPEP 2143.02, "prior art must be considered in its entirety, including disclosures that teach away from the claims"; see also MPEP 2145: "[i]t is improper to combine references where the references teach away from their combination").

For at least these reasons, the Applicants submit that the rejections under 35 U.S.C. §103 is overcome and should be withdrawn. An early Notice of Allowance is earnestly requested. If any fees are due in connection with this application as a whole, the Examiner is authorized to deduct such fees from deposit account no. 02-1818. If such a deduction is made, please indicate the attorney docket number (112740-936) on the account statement.

Respectfully submitted,

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